



Safety data-sheet (91/155 EEC)

Printed 05.12.2005

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elma opto clean

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Name of product	elma opto clean
Manufacturer/distributor	ELMA Hans Schmidbauer GmbH & Co KG Kolpingstr. 1-7, D-78224 Singen (Htwl.) Phone +49 7731 882-0, Fax +49 7731 882-266 E-Mail info@elma-germany.com Internet www.elma-germany.com
Advice	Chemie/Labor Phone +49 7731 882-287 Fax +49 7731 882-266
Emergency advice	Vergiftungs-Informations-Zentrale Freiburg Phone +49 761 19240

Recommended intended purpose(s)

Mildly alkaline cleaning concentrate for the aqueous ultrasonic cleaning of glasses and frames of glasses.

! 2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization

Aqueous mildly alkaline mixture from anionic and non-ionic surfactants, corrosion inhibitors, complexing agent, 1-methoxypropan-2-ol and dye.

! Hazardous ingredients

CAS-No.	EC-No.	Name	[% weight]	Classification
000102-71-6	203-049-8	triethanolamine	< 5	
000107-98-2	203-539-1	1-methoxypropan-2-ol	< 20	R10
005064-31-3	225-768-6	trisodium nitrilotriacetate	< 5	Xn R22; Xi R36
61827-42-7		fattyalcoholethoxylate	< 5	Xn R22; Xi R41
69011-36-5	500-241-6	fattyalcoholethoxylates	< 5	Xi R41

! Additional advice

Ingredients according to Annex VII D of the Regulation (EC) No 648/2004 on detergents: Water (aqua, CAS: 7732-18-5), 1-methoxypropan-2-ol (methoxyisopropanol, CAS: 107-98-2), triethanolamine (triethanolamine, CAS: 102-71-6), isotridecanol, ethoxylated (CAS: 69011-36-5), tall-oil fatty acid (CAS: 61790-12-3) isodecanol, ethoxylated (CAS: 61827-42-7), trisodium nitrilotriacetate (trisodium nta, CAS: 5064-31-3), benzotriazole (benzotriazole, CAS: 95-14-7), perfume (perfume), dye (dye).

3. HAZARDS IDENTIFICATION

4. FIRST AID MEASURES

General information

In the event of persistent symptoms receive medical treatment.

In case of skin contact

In case of contact with skin wash off with water.

In case of eye contact

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

**In case of ingestion**

Do not induce vomiting.

If swallowed seek medical advice immediately and show the doctor packing or label.

Rinse out mouth and give plenty of water to drink.

5. FIRE-FIGHTING MEASURES**Suitable extinguishing media**

water

Alcohol-resistant foam

Dry powder

Carbon dioxide

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

no

Special protective equipment for fire-fighters

no

! 6. ACCIDENTAL RELEASE MEASURES**! Personal precautions**

Use personal protection.

High risk of slipping due to leakage/spillage of product.

Environmental precautions

Do not discharge into surface waters/groundwater.

Methods for cleaning up

Take up with absorbent material (e.g. general-purpose binder).

Flush away residues with water.

Take up mechanically and send for disposal.

7. HANDLING AND STORAGE**Advice on safe handling**

No special measures necessary if used correctly.

Advice on protection against fire and explosion

The product is not combustible.

Requirements for storage rooms and vessels

Keep only in original container.

Further information on storage conditions

Keep container tightly closed.

Keep locked up, out of reach of children

Keep in a cool place.

Do not keep at temperatures below 5°C.

Information on storage stability

Storage time: 5 years.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Ingredients with occupational exposure limits to be monitored**

CAS-No.	Name	Code	[mg/m ³]	[ml/m ³]	Remark
000102-71-6	2,2'-2"-Nitrilotriethanol	MAK	5 E		S
000107-98-2	1-methoxy-2-propanol	MAK	370	100	Y

Eye protection

safety goggles

**General protective measures**

Avoid contact with eyes and skin

Hygiene measures

Provide washing facilities at place of work.

Keep away from food and drink.

9. PHYSICAL AND CHEMICAL PROPERTIES**Form**
liquid**Colour**
red**Odour**
mild**Important health, safety and environmental information**

	Value	Temperature	at	Method	Remark
pH value in delivery state	ca. 9,5	20 °C			
boiling range	>= 100 °C				
solidifying range	<= -5 °C				
Flash point	> 61 °C			DIN 51755	
Density	1,01 g/cm ³	20 °C			
Solubility in water					miscible
Solvent concentration	< 20 %				
Explosive properties	no				

10. STABILITY AND REACTIVITY**Materials to avoid**

Reactions with concentrated acids and alkalis above 50°C.

Hazardous decomposition products

no

11. TOXICOLOGICAL INFORMATION**Acute toxicity/Irritability/Sensitization**

	Value/Validation	Species	Method	Remark
Irritability skin	non-irritant			
Irritability eye	low irritant - no labeling duty			

Experiences made from practice

Has a degreasing effect on the skin.

**! 12. ECOLOGICAL INFORMATION****Data on elimination (persistence and degradability)**

	Elimination rate	Method of analysis	Method	Validation
Physico-chemical degradability	100 %		Neutralization, pH-measurement	
Biological degradability	> 80 %		OECD 302 B	readily degradable

Additional ecological information

	Value	Method	Remark
COD	ca. 434 mgO ₂ /g	DIN ISO 15705	

! General regulation

The surfactants in our product meet the criteria for biodegradation as laid down in Annex III of the Regulation (EC) No 648/2004 on detergents.

Do not discharge product unmonitored into the environment.

13. DISPOSAL CONSIDERATIONS**Waste code No.**

20 01 30

Name of waste

detergents other than those mentioned in 20 01 29

Recommendations for the product

Suitable for neutralization are acetic acid (60%, liquid) or citric acid (solid powder, crystallized) if a stainless steel bath is used.

Product is allowed to discharge into sewage treatment plants, but in accordance with official regulations.

Recommendations for packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Recommended cleansing agent

Water

14. TRANSPORT INFORMATION**Land and inland navigation transport ADR/RID**

No hazardous material as defined by the prescriptions.

Marine transport IMDG

No hazardous material as defined by the prescriptions.

Air transport ICAO/IATA-DGR

No hazardous material as defined by the prescriptions.

! 15. REGULATORY INFORMATION**! Remarks for classification**

The product is not classified as dangerous in accordance with EC directives/German regulations on dangerous substances.



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VOC standard	
VOC content	17 %

16. OTHER INFORMATION

Further information

These data are given according to our actual knowledge about this product. This data sheet does not correspond to an assurance by virtue of a contract for properties of the product.

Sources of key data used

Own measurements.

Wording of the R-phrases specified in chapter 2 (not the classification of the formulation!)

R 10 Flammable.

R 22 Harmful if swallowed.

R 36 Irritating to eyes.

R 41 Risk of serious damage to eyes.